



## Work Instruction (WI)

**DIRECTIVE NO.** 270-WI-5340.2.1J  
**EFFECTIVE DATE:** March 8, 2016  
**EXPIRATION DATE:** March 8, 2021

**APPROVED BY Signature:** Original Signed By  
**NAME:** Naomi Manadier  
**TITLE:** Acting Chief, Information and Logistics  
Management Division

### **COMPLIANCE IS MANDATORY**

**Responsible Office:** 270/Information and Logistics Management Division

**Title:** Control of Non-Conforming Project Parts

## **PREFACE**

### **P.1 PURPOSE**

This procedure describes the process for documentation and disposition of non-conforming products and processes for electrical, electronic, electromechanical (EEE) parts and mechanical hardware that are purchased, inspected, or warehoused within the Information and Logistics Management Division (ILMD).

### **P.2 APPLICABILITY**

This procedure applies to all employees of the ILMD who process EEE parts and mechanical hardware for space flight projects and ground support systems that are covered under the scope of the Goddard Space Flight Center (GSFC) Management System (MS) Policy. Processing of these products is managed by the Code 273 Supply and Equipment Management Branch and supported by the Code 279 Supply Management Branch.

### **P.3 REFERENCES**

- 270-FORM-0068, Receiving Discrepancy Form
- 270-FORM-0150 Material Restricted by GIDEP Form.
- 270-WI-4520.2.1, Receiving Project Parts
- 270-WI-5340.3.1, Response to GIDEPs, Alerts and Safe Alerts
- 300-PG-8730.6.1 GSFC Electrostatic Discharge (ESD) Control Plan
- GPR 5340.2, Documentation and Control of Process Non-conformances and Customer Complaints
- GPR 5340.4, Problem Reporting and Problem Failure Reporting
- GSFC Form 4-33, Non-conforming Product Tag
- GSFC Form 20-2, Receiving Inspection & Test Form (RITF)

### **P.4 CANCELLATION**

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## P.5 TOOLS, EQUIPMENT, AND MATERIALS

- Material handling carts
- Marking and labeling materials
- Computer workstations capable of accessing the Advanced Materials Management System (AMMS).

## P.6 SAFETY PRECAUTIONS AND WARNINGS

Electrostatic Discharge (ESD) sensitive parts shall be handled in accordance with 300-PG-8730.6.1 GSFC Electrostatic Discharge (ESD) Control Plan. Failure to do so could result in damage to the parts.

## P.7 TRAINING

All employees who handle ESD sensitive parts shall be trained and certified in accordance with 300-PG-8730.6.1 GSFC Electrostatic Discharge (ESD) Control Plan.

## P.8 RECORDS

Record Title	Record Custodian	Retention
Material Test, Chemical and Physical Analysis Data	Project Parts Warehouse Supervisor	<i>*NRRS 5/31A1 Destroy 3 years after completion of final production order for the related component.</i>
Form 270-FORM-0068, Receiving Discrepancy Form	Project Parts Warehouse Supervisor	<i>*NRRS 5/31A1 Destroy 3 years after completion of final production order for related components.</i>

\*NRRS 1441.1 NASA Records Retention Schedules

## P.9 MEASUREMENT/VERIFICATION

There are no metrics defined for this instruction.

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## INSTRUCTIONS

In this document, a requirement is identified by “shall,” a good practice by “should,” permission by “may” or “can,” expectation by “will,” and descriptive material by “is.”

### 1.0 Responsibilities

#### 1.1 Supply and Receiving Team Lead

The Code 273 Supply and Receiving Team lead is responsible for the overall management of the nonconformance process as it relates to project parts products and processes. The Supply and Receiving Team lead shall:

- a. Review, process, and document corrective actions for non-conformances that are received from outside of the Code 270 organization;
- b. Initiate process and product findings in the META system, as necessary, that are related to the overall support of project parts by Code 273/270 personnel;
- c. Serve as the Lead for all non-conformances related to Code 273/279 responsibilities; and
- d. Review and distribute NASA Alerts and Safe Alerts related to possible nonconforming product.

#### 1.2 Supply Operations Branch Manager

The Code 279 Supply Operations Branch Manager shall:

- a. Provide overall supervision to the procurement, storage, receipt and distribution of project parts;
- b. Process and respond to all NASA Alerts and Safe Alerts to determine if the subject material has been procured or stored by Code 279.
- c. Assign responsibilities to Project Support personnel to ensure nonconforming product is handled in accordance with GPR 5340.4 and this work instruction.

#### 1.3 Project Parts Warehouse Supervisor

The Project Parts Warehouse Supervisor shall:

- a. Establish a designated area in the warehouse for nonconforming product;
- b. Ensure that this area is segregated from other material and that it is clearly identified it as the nonconforming project parts area;
- c. Provide Project Support personnel with the proper supplies and tools, for example forms GSFC 4-33 and 270-FORM-0068, to perform their jobs.
- d. Notify Supply Branch Manager and Supply and Receiving Team Lead of non-conformances that require reporting to the Meta system.

#### 1.4 Project Parts Inspectors and Warehousemen

Inspectors and Warehousemen who support project parts activities shall:

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- a. Label all nonconforming material with a GSFC 4-33 and segregate that product to the designated area;
- b. Notify appropriate personnel of nonconforming product;
- c. Complete all necessary paperwork associated with the identification of nonconforming product to include the 270-FORM-0068, GSFC 20-2 and GSFC 4-30;
- d. Dispose nonconforming material in accordance with instructions provided by Warehouse Supervisor, Procurement personnel, and Material Coordinators as appropriate; and
- e. Process necessary transactions in the Advanced Material Management System (AMMS).

### **1.5 Procurement Personnel**

Code 279 Procurement Personnel shall:

- a. Purchase project parts in accordance with customer requirement and annotate those requirements on the purchase order and the corresponding GSFC 20-2, Receive Inspection and Test Form (RITF);
- b. Work with the supplier, the Material Coordinator, and the customer to disposition nonconforming product;
- c. Obtain a Return Material Authorization (RMA) from supplier to return and/or replace nonconforming product, as required; and
- d. Process necessary transactions in AMMS.

### **1.6 Material Coordinators**

Material Coordinator's shall:

- a. Coordinate the disposition of nonconforming product by serving as the liaison between the customer, procurement personnel, and the project parts inspector or warehouseman;
- b. Notify Project Parts Warehouse Supervisor of possible nonconforming product that may be in inventory and provide instructions for the disposition of that product; and
- c. Adjust serviceable balances of inventory for nonconforming product and process all other necessary transactions in AMMS.

## **2.0 Nonconforming Product Evaluation and Disposition**

GPR 5340.4 specifies several options for the disposition of nonconforming product. The project or customer that owns the nonconforming product shall make the determination as to the appropriate disposition of that product. Nonconforming product that was purchased by Code 270 for inventory shall be dispositioned by the Code 273 Supply and Receiving Team Lead and the Code 279 Supply Branch Manager.

## **3.0 Procedures for Handling Nonconforming Product**

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The initial identification and notification of nonconforming product may occur in several ways. As such, the procedures for processing nonconforming product will vary depending on the source of the nonconformance identification as described below. The disposition of nonconforming product shall be made by the customer for whom the material was purchased or stored. When material was not purchased or stored for a specific customer or project, disposition of the product will be made by the Supply Branch Manager and the Supply and Receiving Team Lead.

### **3.1 Non-conformances Identified During Incoming Receipt and Inspection**

During the incoming receipt and inspection process, an Inspector may discover that the product received does not match the requirements outlined in the associated GSFC 20-2 Receive Inspection and Test Form (RITF) and purchase order. When this occurs, the Inspector shall tag the product with a GSFC 4-33, place the product in the area designated for nonconforming product, and complete a 270-FORM-0068 that details the reason for the nonconformance. The Inspector will record the discrepancy into AMMS. The completed 270-FORM-0068, along with a copy of the corresponding packing slip, will be given to the Purchasing department for processing.

The Acquisition Specialist and Material Coordinator responsible for the discrepant material will work with the supplier and the customer to resolve the nonconformance. The Acquisition Specialist will make all attempts to remedy the nonconformance so that the material meets the customer's original requirements. When this is not possible, the Material Coordinator will contact the customer to determine the disposition of the material. For example, use as is, reclassify, or return to vendor. Once the product disposition has been made, the Acquisition Specialist will complete the 270-FORM-0068 and return it to the Inspector for processing, as appropriate.

In cases where the material was not purchased for a specific customer but instead was purchased for general inventory, the Acquisition Specialist and Material Coordinator will notify the Supply Branch Manager of the problem. The Supply Branch Manager and the Supply and Receiving Team Lead will work together to disposition the nonconforming product and provide this disposition to the appropriate personnel for processing.

The Inspector will either package and return the material to the supplier or complete the incoming receipt and inspection process in accordance with 270-WI-4520.2.1, per the instructions found on the 270-FORM-0068.

As a final and independent Quality Control (QC) review, the TRAX Customer Service Material Coordinator reviews all discrepancy reports, 270 FORM-0068, to ensure discrepancy reports are properly recorded in AMMS.

### **3.2 Non-conformances Discovered during Product Testing**

When material is returned from the testing lab because of a product nonconformance, the Inspector or Warehouseman shall tag the material with a GSFC 4-33 and place it in the designated area. Nonconforming material returned from the testing lab will be accompanied by a nonconformance report

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or similar documentation which specifies the reason for the nonconformance. The Inspector or Warehouseman will complete a 270-FORM-0068, attach the corresponding paperwork, and submit it to the Purchasing department for processing.

The Acquisition Specialist and Material Coordinator will work with the supplier and the customer, if applicable, to evaluate and disposition the product. Once disposition has been made, a completed 270-FORM-0068 will be returned to the Inspector or Warehouseman for appropriate processing.

### **3.3 Non-conformances Discovered during Material Storage**

When a product nonconformance is discovered while the material is being stored by Code 279, a Warehouseman shall tag the material with a GSFC 4-33 and place it in the designated area. The Warehouseman will report the nonconformance to the Project Parts Warehouse Supervisor and the cognizant Material Coordinator. The Material Coordinator will adjust the serviceable balance for the item in question as necessary and will notify the Supply Branch Manager of the issue. The project that owns the material in question will be notified and all parties will work to disposition the product. The nonconforming material will be dispositioned in accordance with direction provided by the owning project or customer.

The Supply Branch Manager and the Project Parts Warehouse Supervisor will work to determine the cause of the nonconformance. These individuals are responsible for the implementation of any corrective action or preventive measures deemed necessary as a result of their findings.

### **3.4 Non-conformances Reported by Customers**

Project support personnel may receive notice from a customer or project that material received from Code 279 was nonconforming. When this occurs, Warehousemen will pull any remaining material out of location and tag and segregate the material to the nonconformance area. Material Coordinators and Acquisition Specialists will work to identify the source of the nonconforming material and work to return or replace that material as necessary. The Material Coordinator will ensure that all necessary transactions are processed in AMMS to coincide with the disposition of the product. The Supply Branch Manager and Supply and Receiving Team Lead will determine if the nonconformance could have or should have been identified prior to release of the material to the customer, and if so, implement any corrective action or preventive measures to ensure that a similar incidents do not occur again.

### **3.5 Non-conformances Discovered through NASA Alerts and GIDEP Notices**

Upon receipt of a NASA Alert or GIDEP notice, the Supply Branch Manager will work with the Project Support team to determine if the material identified in the alert has been purchased or stored by Code 279. This work will be performed in accordance with 270-WI-5340.3.1. All customers who may have received nonconforming product identified through a NASA Alert or GIDEP notice will be notified immediately by the Supply Branch Manager and/or the Supply and Receiving Team Lead. Any nonconforming product that remains in storage will be dispositioned by the owning project or customer.

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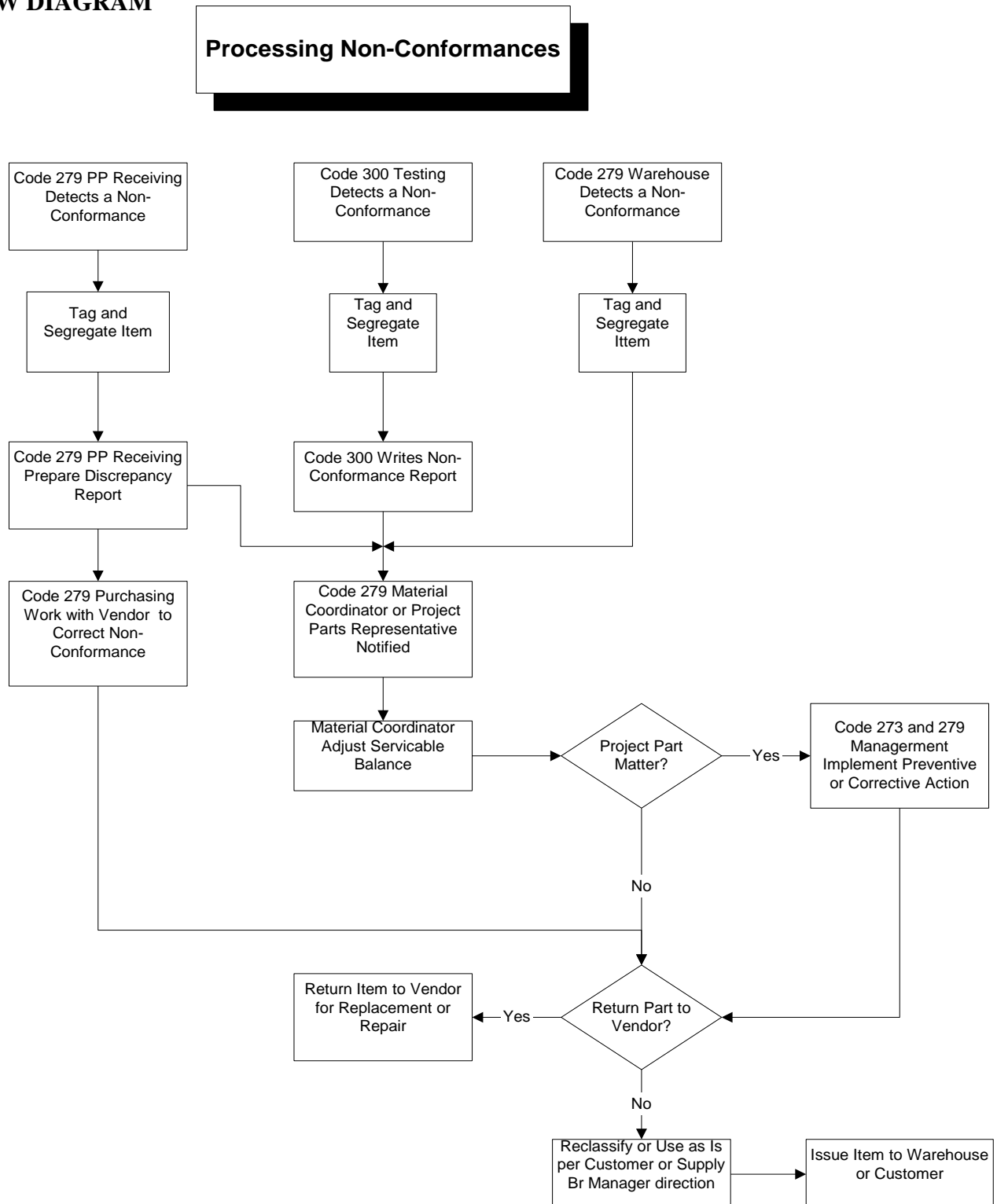
Product remaining in inventory which is subject of a GIDEP or NASA Alert shall be tagged with a 270-FORM-0150 Material Restricted by GIDEP form.

#### **4.0 Non-conformance Management**

The overall Corrective Action/Preventive Action (CAPA) Lead for the activities in this work instruction is the Code 273 Supply Team Lead. The CAPA serves as the principal point of contact within ILMD responsible for the management and proper functioning of the nonconformance process in this functional area. He/she provides technical oversight and identifies nonconformance trends that may require changes to existing policies or procedures, and reports significant issues to higher management. The CAPA Lead is also responsible for reviewing and processing the Product Findings (PR/PFR), and Process Non-conformances initiated in-house or received from any source as well as directing and documenting corrective and preventive action. The primary documentation for these activities shall be created in the automated META System, which is accessed via the [GSFC MS website](#).

All Product Findings and Process Non-conformances shall be initiated, processed and dispositioned in accordance with GPR 5340.2, Documentation and Control of Process Non-conformances and Customer Complaints, and GPR 5340.4, Problem Reporting and Problem Failure Reporting.

## FLOW DIAGRAM





## Appendix A – Definitions

- A.1 Certificates of Compliance (C of C): Parts documentation that includes manufacturer name, manufacturer location, date codes, date of manufacture, part number, lot number, applicable specification and name and signature of the manufacturer’s authorized representative. The data reflected on a C of C may vary with product manufacturer (s).
- A.2 Electro-Static Discharge (ESD): A transfer of an electrostatic charge (static electricity) between objects at different (electrostatic) levels. It is caused by direct contact or induced by an electrostatic field. ESD has the “potential” to damage sensitive electronic parts if not dissipated properly.
- A.3 ESD Material: Material that is sensitive to electro-static discharge and could be damaged by it. Special Handling is required.
- A.4 Non-conformance: Non-fulfillment of a specified requirement. This term is generally used to describe both product and process findings and issues
- A.5 Project Parts: EEE parts or mechanical hardware that are obtained by the Code 279 Project Support team for distribution to projects. These parts may be used by the projects for engineering and/or flight equipment.
- A.6 Return to vendor: Action taken to return non-conforming product to the vendor for replacement (if desired) and corrective action.
- A.7 The names “Code 279 Project Support,” “Project Support team,” and “Project Support” are interchangeable and refer to the Code 279 Project Support section that supports Center and NASA programs and projects and their mission requirements.
- A.8 Use-as-is: Approving the use of non-conforming product without resort to rework or repair.

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## **Appendix B – Acronyms**

**AMMS** – Advanced Materials Management System  
**CAPA** - Corrective Action/Preventive Action  
**EEE** – Electrical, Electronic, Electromechanical  
**ESD** – Electrostatic Discharge  
**GIDEP** - Government-Industry Data Exchange Program  
**GSFC** – Goddard Space Flight Center  
**ILMD** – Information and Logistics Management Division  
**MS** – Management System  
**QC** – Quality Control  
**RITF** – Receiving Inspection and Test Form (RITF)  
**RMA** – Return Material Authorization

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### CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	1 Oct 98	Initial Release
A	1 Feb 99	<ul style="list-style-type: none"> <li>- Adds information to section P4 on Quality Records.</li> <li>- Adds section 8.3 on Non-conformance Reporting</li> </ul>
B	27 Apr 99	<ul style="list-style-type: none"> <li>- 8.3.1 Update NCR organization with correct project name and lead designation.</li> <li>- Add wording to indicate that all audit discrepancies will be documented with an NCR</li> </ul>
C	1 June 99	<ul style="list-style-type: none"> <li>- Modified P4 to identify proper Record Retention Schedule</li> <li>- Inserted P8 Cancellation</li> <li>- Renumbered old P8 to P9 and all associated subparagraphs.</li> <li>- Renumbered old P9 to P10 and modified flow diagram numbering.</li> </ul>
D	13 Aug 99	<ul style="list-style-type: none"> <li>- Modified 9.3 to provide for both major and minor non-conformances.</li> </ul>
E	10 Feb 00	<ul style="list-style-type: none"> <li>- Changed the web site for the automated NCR/CAS system to <a href="http://ncr.gsfc.nasa.gov">http://ncr.gsfc.nasa.gov</a>.</li> </ul>
F	23 Dec 02	<ul style="list-style-type: none"> <li>- Converted to most recent WI template form.</li> <li>- Updated website to include slash at the end.</li> <li>- Inserted P5.c</li> <li>- Modified P7. to include NCR website training.</li> <li>- Changed "Inventory Manager" to "Material Coordinator" throughout</li> <li>- Section 1.2 Add Safe alerts</li> <li>- Section 1.4 Add obtainment of Return Material Authorization</li> <li>- Section 2.1 d. Include Material Test Data and Chemical and Physical Analysis data to NCR package.</li> </ul>
G	4 Feb 05	<ul style="list-style-type: none"> <li>- As directed during the FY04 Center Rules Review, the Responsible Office modified this document to remove requirements that were no longer needed and to clearly distinguish requirements from supporting information. Administrative changes were made throughout to correct responsible organization names and codes, and to re-title</li> </ul>

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		Goddard Procedures and Guidelines (GPG) to Goddard Procedural Requirements (GPR). - Updated Section 4 – Non-conformance Management
G	14 May 06	- Administratively updated to reflect a change in the owning organization code from 230 to 270.
H	12 Dec 09	- Several administrative changes made including the update to the new WI template, changing all QMS references to MS, clarification of training requirements, and the change in records keeping responsibilities to the Project Parts Warehouse Supervisor. - Changed all references from NCR/CAS System to the Audit/NCR System and updated URL. - Entire document rewritten to bring it in alignment with current Center procedures for processing non-conformances.
I	21 Aug 14	- Documented the requirement that Inspectors record discrepancies into AMMS - Established a final and independent QC check by the TRAX Customer Service Material Coordinator to ensure discrepancies were logged into AMMS
J	08 Mar 16	- P3 Updated GPR with new name Documentation and Control of Process Non-conformances and Customer Complaints - P3 Added GPR 5340.4, Problem Reporting and Problem Failure Reporting - P3 Added 270-FORM-0150 Material Restricted by GIDEP form. - P3 Replaced WOA with GSFC Form 20-2, Receiving - Deleted GPR 1710.1, Corrective and Preventive Action because it was cancelled. - Inspection & Test Form (RITF) - Sec. 3.5 added 270-FORM-0150 Material Restricted by GIDEP form. - Sec 4.0 Deleted entire Non Conformance Management section and replaced with updated CAPA plan. - Appendix A Reformatted

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